

Claims

1-6. (Cancelled)

7. (Currently Amended) A seamless expandable oil country tubular article comprising: on a mass percent basis, about 0.010% to less than about 0.10% of C, about 0.05% to about 1% of Si, about 0.5% to about 4% of Mn, about 0.03% or less of P, about 0.015% or less of S, about 0.01% to about 0.06% of Al, about 0.007% or less of N, and about 0.005% or less of O; at least one of Nb, Mo, and Cr which are contained in the range of about 0.01% to about 0.2% of Nb, about 0.05% to about 0.5% of Mo, and about 0.05% to about 1.5% of Cr, so that equations (1) and (2) are satisfied; and Fe and unavoidable impurities as the balance:

$$\text{Mn} + 0.9\text{Cr} + 2.6\text{Mo} \geq 2.0 \quad (1)$$

$$4\text{C} - 0.3\text{Si} + \text{Mn} + 1.3\text{Cr} + 1.5\text{Mo} \leq 4.5 \quad (2)$$

wherein the steel article has a microstructure that contains soft ferrite at a volume fraction of about 5% to about 70% and the balance substantially composed of a low temperature transforming phase bainitic ferrite, bainitic martensite, bainite or mixtures thereof.

8. (Previously Presented) The article according to claim 7, further comprising, instead of a part of Fe, at least one of about 0.05% to about 1% of Ni, about 0.05% to about 1% of Cu, about 0.005% to about 0.2% of V, about 0.005% to about 0.2% of Ti, about 0.0005% to about 0.0035% of B, and about 0.001% to about 0.005% of Ca.

9. (Currently Amended) A seamless expandable oil country tubular article comprising: on a mass percent basis, about 0.010% to less than about 0.10% of C, about 0.05% to about 1% of Si, about 0.5% to about 4% of Mn, about 0.03% or less of P, about 0.015% or less of S, about 0.01% to about 0.06% of Al, about 0.007% or less of N, and about 0.005% or less of O; at least one of Nb, Mo, and Cr which are contained in the range of about 0.01% to